

REMARKS/ARGUMENTS

The present amendment is submitted in response to the Office Action dated November 17, 2004, which set a three-month period for response, making this amendment due by February 17, 2005.

Claims 1 and 34-47 are pending in the application.

In the Office Action, claims 1, 6, 18, 19, and 22-33 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 1, 6, 18, and 19 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,446,346 to Castleman. Claims 22-33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Castleman in view of U.S. Patent No. 5,452,569 to Anderson.

In the present amendment, claims 6, 18, 19, and 22-33 have been canceled, and new claims 34-47 have been added. Claim 1 has been amended to more clearly define the present invention over the cited references.

The cited reference to Castleman shows a three-bladed knife, whose cutting blades are formed in a double-trapezoidal shape in the cutting area. For purposes of clarification, sketches of a cutting blade of the assembly shown in Castleman are attached as Appendix A (Figs. 1 and 2).

According to Fig. 7 of Castleman, an outer cutting region is formed as a trapezoid. An inner region of the cutting blade has concavely curved edges. The concavely curved edges are approximately linear only radially outward near the cutting edges 128, 130. Therefore, a double trapezoid shape is only shown in this region. According to Fig. 7 of Castleman and Fig. 1 of the Appendix to this amendment, the edges run in a radially inner region approximately parallel to one

another and to a radial center line f . The double trapezoid shape, therefore, is determined by a radially outer edge angle $\alpha > 0^\circ$ and an inner edge angle $\beta = 0^\circ$.

The double trapezoid shape claimed in the present application, in which such an edge angle α is approximately twice as large as the inner edge angle β is not disclosed in Castleman.

Furthermore, in Castleman, the radially outer trapezoidal region a extends over a much larger radial region than the radially inner trapezoidal region b (see Fig. 1 of the Appendix). According to new claims 34-47, however, the complete opposite configuration is provided: namely, that the radially outer edges are shorter than the radially inner edges, whereby according to page 4 of the specification, an almost elliptical knife shape is achieved. This generally elliptical structure also is not provided by Castleman.

The patent to Anderson, cited in combination with Castleman, discloses various embodiments of knives, in which two outer cutting sections are arranged at an angle to one another, without, however, disclosing or suggesting a trapezoidal shape. The radially inner cutting edges run parallel to the radial axis of the knife, while the radially outer cutting edges are angled thereto. The radially inner and radially outer cutting edges are approximately the same length.

Therefore, the features of new claims 34-47 also are not made obvious by the combination of the Castleman and Anderson patents.

According to new claims 34-47, an embodiment is claimed, in which radially outer and radially inner cutting sections form a double trapezoid. This arrangement is neither disclosed nor suggested by the primary reference to Castleman. Fig. 7 and the associated description of Castleman do not provide any precise information

about the cut of the blades for forming a cutting edge. The only possible suggestion is a line in Fig. 7, which is shown without a reference numeral, which in the attached sketches of Appendix A, is designated as "c". This obviously represents a straight cutting edge. A sloping or slanted cut of the outer trapezoidal region a along the cutting edge c effects a sharp-edged construction of the outer edges 128, 130 in the outer trapezoidal region a.

Without additional features, a cut along the cutting edge c leads to an edge shape, which is shown in Fig. 2 of attached Appendix A. The linearly running cutting edge c extends to the radially inner trapezoidal region b. At the cut-off point between the two trapezoidal regions a, b, which is represented by a dashed line d, however, a blunt edge 3 runs from there radially inward. This blunt edge cannot be a cutting edge, due to its bluntness. Therefore, Fig. 7 of Castleman fails to disclose a double trapezoidal-shaped arrangement of cutting edges. The double trapezoid defined in new claims 34-47, therefore, is not anticipated by the Castleman reference.

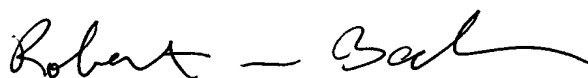
In view of the foregoing, it is respectfully submitted that Castleman is not a proper reference under either MPEP section 2131 or section 2143.03, since the reference does not teach or suggest every element of the new, independent claims.

Likewise, the combination of the Castleman and Anderson patents does not suggest the double trapezoidal arrangement of the cutting edges. It is respectfully submitted that since the prior art does not suggest the desirability of the claimed invention, such art cannot establish a prima facie case of obviousness as clearly set forth in MPEP section 2143.01.

In view of the foregoing discussion, the Applicants respectfully submit that claim 1 and new claims 34-47 are patentable over the cited art of record. In

addition, should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call from him to discuss any outstanding issues, and in particular any further amendments to the claims to bring the application into condition for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert W. Becker", with a long horizontal flourish extending to the right.

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